



SDI Review Form 1.6

Journal Name:	British Microbiology Research Journal
Manuscript Number:	2013_BMRJ_8004
Title of the Manuscript:	Physical and chemical aspects of Yarrowia lipolytica lipase immobilization by adsorption
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	1. In the line 39, I suggest citing a paper by Bayramoglu et al. (Bioprocess. Biosyst. Eng. 34 (2011) 735–746). At this point I also suggest to include a new reference (Chemical Engineering Journal 181– 182 (2012) 614–623) instead of Reference 6. 2. The text in the Section 2.2.2 and 2.2.3 overlaps with the text given in the authors' previous paper (Appl Biochem Biotechnol (2008) 150:51–63), but was not stated properly. Please correct this. 3. The results of the whole Section 3.1 were already given in the previous paper of the same authors, with slightly different obtained results. It was found that the immobilization yields were 76 and 43 % for celite and silica gel, respectively and this in not stated properly in this paper (see Appl Biochem Biotechnol (2008) 150:51–63). Please explain these new (different) findings. 4. The text in lines 129-132 is confused (English language), please correct it. 5. There is no any discussion on avicel, except that very few results concerning this support were given in the paper. I think it is necessary to incorporate some discussion concerning this matrix (such as to consider water content and water activity and thus to improve Section 3.2 instead of only offering numbers to the readers, since anyone can see this from tables). 6. Page 16, Figure 1, pH 8 is missing. Please correct this. 7. The Researcher from the institution affiliated with number 2 is missing or the affiliation itself is annotated incorrectly. Please correct this.	1. We have cited in line 56, we replace the reference line 233 and 247 2. We have corrected it line 97 3. The immobilization yield is 76% (celite) and 35% (silica gel) when we the method 2 (1.2/20) in previous paper. In this work we have used the same method instead (1.2/6). We have corrected it in material and methods. New result is 70% and 29% The pourcentage was different because of the enzymatic activity measurement method. 4. We have corrected it line 129-132 5. we have corrected it 6. we have corrected it 7. we have corrected it



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<u>Minor</u> REVISION comments	Herewith, I suggest the list of typos and minor changes (highlighted in blue in the supplied pdf file). Please change (as suggested in notes) the text in the following lines: In Abstract: Lines 6, 8 and 14 In Introduction: Lines 40, 53, 54 and 66 In Materials and Methods: Lines 83, 98, 108, 109 and 114 In Results and discussion: Lines 135, 148, 151, 163 and 165	All the correction has been made
<u>Optional/General</u> comments	The Manuscript deals with immobilization of <i>Yarrowia lipolytica</i> lipase on different supports by adsorption in order to perform an interesterification reaction in media with low water content. The experiment is thorough but the discussion on water content and activity as well as the interesterification of a fat blend is sloppy. The paper needs to be focused on the main questions the authors propose to answer, and why these questions are important. The references are comprehensive and appear to be up-to-date, except very few of them. However, the Manuscript is read smoothly and is recommended for publication in British Microbiology Research Journal after modifications and major revision.	